G. F. SHAVER.

Mail-Bag Catch.

No. 195,956. Patented Oct. 9, 1877.

Fig: 1.

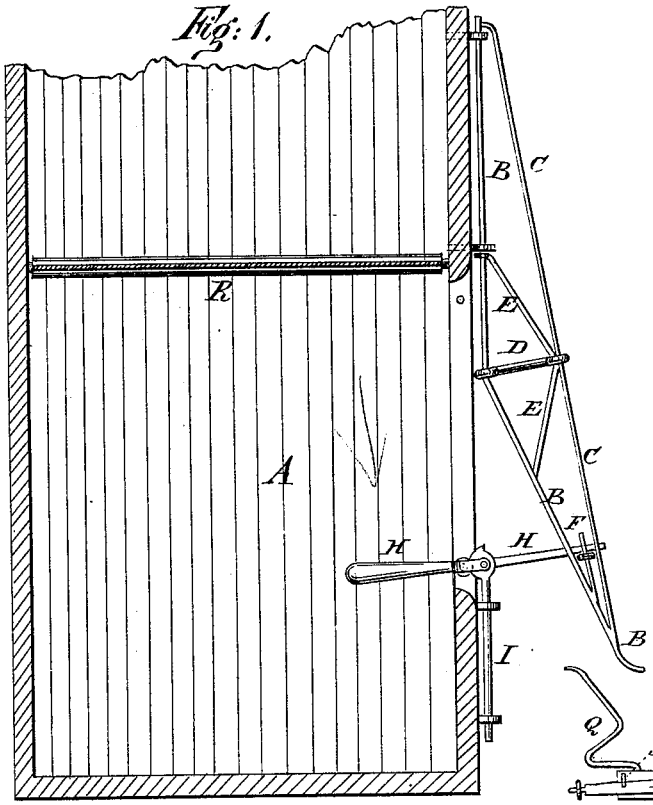


Fig: 3.

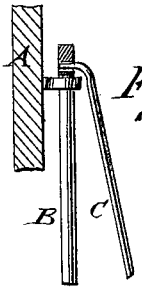


Fig: 4.

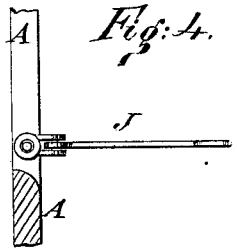


Fig: 5.

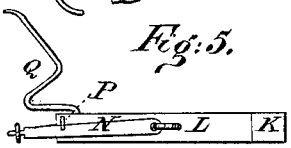


Fig: 6.

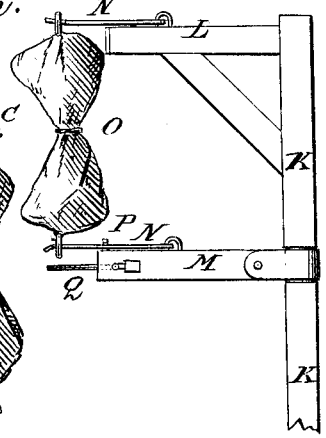
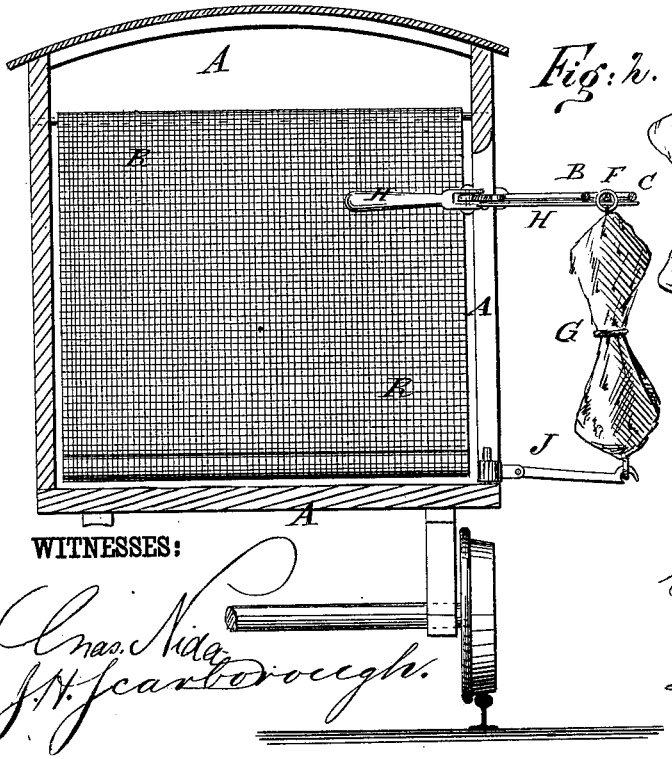


Fig: 2.



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UNITED STATES PATENT OFFICE.

GEORGE F. SHAVER, OF MOORHEADVILLE, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND MOSES D. TENNANT, OF WESTFIELD, NEW YORK.

IMPROVEMENT IN MAIL-BAG CATCHES.

Specification forming part of Letters Patent No. **195,956,** dated October 9, 1877; application filed September 1, 1877.

To all whom it may concern:

Be it known that I, GEORGE F. SHAVER, of Moorheadville, county of Erie, and State of Pennsylvania, have invented a new and Improved Mail-Bag Catcher, of which the following is a specification:

Figure 1 is a horizontal section of a car to which my improvement has been applied. Fig. 2 is a vertical section of the same. Fig. 3 is a detail section, showing the rear end of the angular arm and its long brace. Fig. 4 is a detail view of the swiveled and hinged hook. Fig. 5 is a top view of the ground-crane. Fig. 6 is a side view of the ground-crane.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device for taking mail-bags upon and delivering them from a railroad mail-car while in motion, and which shall be simple in construction and reliable in operation, taking up and delivering the mail-bags with certainty and without injuring them.

The invention consists in the construction and arrangement of parts, as hereinafter described and claimed.

In the drawing, A represents a mail-car. B is an angular bar, the rear arm of which works in eyebolts or other bearings attached to the side of the car A, at the rear side of the doorway. The angular bar B is strengthened by the long straight brace C, the forward end of which is permanently attached to the forward end of the bar B, and its rear end is detachably attached to the rear end of said bar B, so that it can be detached to allow the bar B to be removed and reversed when the car is to be run the other end forward. The frame B C is further strengthened by the cross-brace D, one end of which is attached to the angle of the bar B, and its other end to the center of the brace C, and by the inclined braces E, one end of which is attached to the brace C at the end of the brace D, and their other ends are attached to the bar B upon the opposite sides of its angle. To the bar B, near its forward end, is attached a short rod, F, which projects to the rearward between the said bar B and the brace C, and is designed to receive a ring formed upon the end of the bag G to be delivered. The forward end of the frame B C D E is supported in a horizontal position to support the bag to be delivered, and to receive the bag to be taken up by the jointed lever H, which is hinged at its joint to a rod, I, working in eyebolts or other bearings attached to the side of the car A, in such a position that the lever H may work through the doorway of the car. The inner arm of the lever H is weighted to support the frame B C D E and the mail-bag suspended from it. J is a hook, which is hinged to a pin swiveled to the threshold of the car A directly beneath the jointed lever H. The hook J is designed to receive a ring attached to the lower end of the mail-bag G. K is a crane attached to the ground at the side of the track, and which is provided with two arms, L M. The upper arm, L, is rigid, and is strengthened by a brace. The lower arm, M, is connected with a rounded part of the post of the crane by a strap or other means, so that it can swing around the said post. To the upper side of the arms L M are pivoted the inner ends of two bars, N, the outer ends of which project beyond the ends of the arms L M, and are designed to receive the rings attached to the ends of the mail-bag O to be taken up by the car. To the upper side of the end of the lower arm M is attached a T-headed pin, P, for the lower bar N to rest against. To the side of the outer end of the lower arm M is attached the end of a reversible rod, Q, which has a V-loop formed upon it, and which is designed to receive the bag to be delivered from the car.

With this construction, as the cars approach the station, the bags G O being suspended, as hereinbefore described, the bent rod Q takes the bag G from the frame B C D E by passing between its middle part and the car, and the frame B C D E takes the bag O from the crane K L M N by passing between its middle part and the post K. The momentum of the bag G causes the arm M to swing around upon the post K, and the momentum of the car causes the bag O to slide along the inclined outer arm of the bar B, knock away the outer arm of the lever H, and be projected into the car, where it strikes against a curtain, R, suspended within the car, and having its lower

end weighted, so that the momentum of the bag may be checked without having the contents of the said bag injured.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The angular bar B, strengthened by the braces C D E, and working in bearings attached to the side of the car to receive the bag to be taken up, substantially as herein shown and described.

2. The jointed and weighted lever H and its rod I, in combination with the angular frame B C D E, to support the bag to be delivered, substantially as herein shown and described.

3. The jointed and swiveled hook J, in combination with the angular frame B C D E, and the jointed and weighted lever H and its rod I, to hold the lower end of the bag to be delivered, substantially as herein shown and described.

4. The combination of the bent rod Q with the swinging arm of the crane K, to receive the bag to be delivered, substantially as herein shown and described.

GEORGE FREDERIC SHAVER.

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